

**AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. APP. NO. 09/897,731**

REMARKS

Claims 1-9 are pending in the application. Claims 1, 3, 5, 8 and 9 are rejected under 35 U.S.C. § 103 as being unpatentable over admitted prior art, Fig. 1, in view of Schweitzer, III (USP 5,208,545).

Claims 2, 6 and 7 are rejected under 35 U.S.C. § 103 as being unpatentable over admitted prior art, Fig. 1, in view of Schweitzer, III and further in view of Betts et al (USP 5,768,311).

Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form.

Claim 1 is objected to for a minor informality, which is corrected by this Amendment.

Claim Rejections - 35 U.S.C. § 103

In rejecting claim 1, the Examiner refers to Schweitzer, III as teaching a plurality of low-pass filters 49 and concludes that it would have been obvious to include a phase compensating low-pass filter between elements 100 and 110 of admitted prior art, Fig. 1. The Examiner implies that the invention defined by claim 1 is therefore rendered obvious. Applicant would respectfully rebut several concepts in the Examiner's reasoning.

First, Applicant submits that the references do not teach or suggest, "a phase transition filter group comprising a number of phase transition filters equal to the number of the plurality of signals, where based on phase information east of said phase transition filters performs filtering to generate a signal having a phase altered with respect to an input signal." According to one embodiment of the invention shown in Fig. 3, phase transition filters 311, 312 and 313 are

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constituted as shown in Fig. 5, where the filter coefficients are selected according to phase information PH1, PH2, PH3 supplied from multiplexing unit 320 (see Fig. 6) where the phase information is output from phase information generator 603 of the multiplexing unit 320. This is an example of how the phase transition filters perform filtering based on phase information. Also, claim 1 specifies that the multiplexing unit provides the phase information.

On the other hand, the low-pass filters 49 of Schweitzer, III are simply conventional low-pass analog filters (see col., 2, lines 61-68). There is no teaching or suggestion in this reference that the low-pass filters 49 perform filtering based on phase information or that the phase information is provided by a multiplexing unit. Instead, the multiplexer 51 merely selects the output of the various filters 49, but in no way affects the filtering process of these filters. For at least the above reasons, Applicant submits that the combination of references cited by the Examiner does not render obvious the invention of claim 1.

Applicant believes that dependent claims 3 and 5 are patentable for at least the reasons that claim 1 is patentable.

Regarding claim 8, comments similar to those provided for claim 1 also apply to this claim.

For claim 9, Applicant submits that Schweitzer, III does not teach or suggest performing phase transition on each of the signals based on the predetermined phase information.

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Regarding dependent claims 2, 6 and 7, Betts does not make up for the deficiencies of applicant's admitted prior art and Schweitzer, III, and for at least this reason, these claims are patentable.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

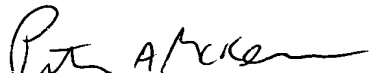
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